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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,848	03/29/2001	Toivo T. Kudas	41890-01350	3550

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EXAMINER

TALBOT, BRIAN K

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/821,848	Applicant(s) KODAS ET AL.	
	Examiner Brian K. Talbot	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33 and 35-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The response filed 9/21/06 has been considered and entered. Claims 1-32,34 and 40-85 have been canceled. Claims 33 and 35-39 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Applicant acknowledged the ODP, but has opted to wait to file a Terminal Disclosure until some of the claims are found allowable in either application.
4. In light of the amendment filed 9/21/06, the 35 USC 102 and 103 rejections over Bi et al. (2005/0158690) alone have been withdrawn.

Claim Rejection - 35 USC § 103

5. Claims 33 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schultz et al. (5,985,356) in combination with Wildpaner (3,835,873), Jorre et al. (3,359,784) or Bi et al. (2005/0158690).

Schultz et al. (5,985,356) teaches a process for depositing a plurality of reacted materials upon specific regions of a substrate and analyzing various properties of the deposited materials. The materials may be a variety of materials and different compositions. The materials are synthesized and analyzed (see abstract and col. 3, line 10 – col. 4, line 59). A variety of properties can be analyzed (col. 8, lines 39-57). The components are reacted after deposition that

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includes heating (col. 9, lines 15-25). The screening techniques are various (col. 26, line 52 – col. 29, line 65).

Schultz et al. (5,985,356) fails to specifically teach a “real-time” monitoring of a mixture of the components for changes in the composition of the reacted materials.

Wildpaner (3,835,873) teaches a method of producing a mixture with a constant component composition made of several starting materials and regulating this mixture to maintain the constant composition. The mixture is analyzed with X-ray fluorescence and a change is made in order to maintain the desired composition.

Jorre et al. (3,35,9784) teaches a method of control of industrial processes by continuous analysis of a mixture having a variable composition and adjusting the values to keep a desired composition during the process (col. 1, lines 10-65).

Bi et al. (2005/0158690) teaches combinatorial synthesis methods to obtain a plurality of compositions having materially different characteristics using an apparatus having a plurality of collectors. A first quantity of fluid reactants are reacted to form a first quantity of product composition. A second quantity of fluid reactants are reacted to form a second quantity of product composition different from the first product composition (abstract). Bi et al. (2005/0158690) teaches reacting various precursor reactants and subsequently reacting an altered version of the reactants and continuing this process until a material having the desired composition is obtained and the reactants can be mixed ([0031]-[0032], [0041] and [0055]). The altering of the components is construed to be consistent with “real-time” basis analysis. Variety of materials can be used in the invention and include catalysts and particles ([0004] and [0047]). The material is depositing by nozzles such as ink-jet which would meet the claimed direct-write

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limitation ([0008] and [0077]). The coating can be subjected to further processing including heat treatment ([0102]-[0115]).

Therefore, it would have been obvious at the time the invention was made to have modified Schultz et al. (5,985,356) process to incorporate "real-time" monitoring of the linear multi-layered structure as evidenced by Wildpaner (3,835,873), Jorre et al. (3,35,9784) or Bi et al. (2005/0158690) with the expectation of achieving a more consistent final product as a result of tighter control of the process to avoid downtime or unacceptable results.

While the Examiner acknowledges the fact that the references fail to specifically teach forming linear multi-layered structures, the use of pastes in ink-jet nozzles for forming linear features is commonplace in the art.

Double Patenting

6. Claims 33 and 35-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 48,52,56,58 and 59 of U.S. Patent No. 09/821,723.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not yet been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Response to Amendment

7. Applicant's arguments with respect to claims 33 and 35-39 have been considered but have not been found persuasive.

8. Applicant argued that the prior art (Wildpaner (3,835,873) and Jorre et al. (3,359,784)) are of non-analogous art.

Applicant argued that the Bi et al. (2005/0158690) teaches controlling the compositional ratio of "discrete" collection of the coating and not for real-time.

The Examiner disagrees and directs applicant to the rejection above where "real-time" adjustments are made in the compositional components of Bi et al. (2005/0158690).

Furthermore, The test of obviousness is not express suggestion of the claimed invention in any or all references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. *In re Rosselet*, 347 F.2d 847, 146 USPQ 183 (CCPA 1965); *In re Hedges*, 783 F.2d 1038.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 11/14/06
Brian K Talbot
Primary Examiner
Art Unit 1762

BKT